Serial No.: 10/594,455 Atty Dkt No.: LNK-020

Response to Non-Final Office Action of January 15, 2010

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of the claims in the application:

- 1. (Canceled) A process for purifying VWF comprising the step of carrying out at least one hydroxylapatite flow chromatography.
- 2. (Currently Amended) The A process for purifying wild-type von Willebrand factor (VWF) from a plasma fraction, comprising the steps of:
 - composition plasma fraction containing wild-type VWF and one or more contaminating proteins with a hydroxylapatite matrix under conditions that permit so as to bind at least one contaminating protein to bind to the hydroxylapatite matrix, while VWF is substantially not bound to the hydroxylapatite matrix, and optionally
- (ii) <u>collecting a flow through fraction containing separating</u> unbound VWF-from the hydroxylapatite matrix.
 - 3. (Canceled) The process according to claim 2, characterized in that VWF is found in the flow and at least one contaminating protein is bound to hydroxylapatite.
 - 4. (Previously Presented) The process according to claim 2, characterized in that the contaminating protein is fibronectin or fibrinogen.
 - 5. (Currently Amended) The process according to claim + 2, characterized in that the hydroxylapatite flow chromatography with hydroxyapatite is carried out at a pH of 6.5 to 8.0, preferably 6.8 to 7.5.

Serial No.: 10/594,455 Atty Dkt No.: LNK-020

Response to Non-Final Office Action of January 15, 2010

6. (Currently Amended) The process according to claim +2, characterized in that a solution containing sodium phosphate and/or potassium phosphate is used as the a running buffer in the flow chromatography with hydroxyapatite.

- 7. (Currently Amended) The process according to claim + 2, <u>further comprising the step of re-chromatographing the flow through fraction containing unbound VWF with hybroxyapatite under binding conditions such characterized in that VWF is <u>first</u> bound to a hydroxylapatite matrix in a separate chromatographic step and then <u>subsequently</u> eluted.</u>
- 8. (Currently Amended) The process according to claim 7, characterized in that in the separate chromatographic re-chromatography step comprises:
 - (a) binding VWF to the hydroxylapatite matrix,
 - (b) washing out impurities, and
 - (c) eluting the VWF containing fraction of interest at a higher salt concentration.
- 9. (Previously Presented) The process according to claim 8, characterized in that in step (a) a composition containing VWF, one or more contaminating proteins and 1 to 200 mM sodium and/or potassium phosphate, is contacted with the hydroxylapatite matrix.
- 10. (Previously Presented) The process according to claim 8, characterized in that in step (b) the hydroxylapatite matrix is washed with a buffer containing 100 to 300 mM sodium and/or potassium phosphate.
- 11. (Previously Presented) The process according to claim 8, characterized in that in step (c) the VWF containing fraction of interest is eluted with a buffer containing 200 to 500 mM sodium and/or potassium phosphate.
- 12. (Currently Amended) The process according to claim 7, characterized in that the hydroxylapatite-re-chromatography step is carried out at a pH of 5 to 7.5.

Serial No.: 10/594,455

Atty Dkt No.: LNK-020

Response to Non-Final Office Action of January 15, 2010

13. (Currently Amended) The process according to claim 12, characterized in that flow chromatography with hydroxylapatite is initially carried out, such that VWF does not bind to the hydroxylapatite matrix, then the further comprising the step of rechromatographing the flow through fraction containing unbound VWF fraction is re-chromatographed under binding conditions and eluting the VWF fraction is eluted.

14. (Currently Amended) The process according to claim + 2, characterized in that a wherein the plasma fraction has been previously purified plasma fraction is used as a starting material.

15. (Currently Amended) The process according to claim <u>12</u>, <u>characterized in that a wherein</u> <u>the plasma fraction comprises a separately purified cryoprecipitate solution is used as a starting material.</u>

16. (Currently Amended) The process according to claim + 2, characterized in that a wherein the plasma fraction comprises a cryoprecipitate solution precipitated with aluminum hydroxide is used as a starting material.

17. (Currently Amended) The process according to claim + 2, characterized in that a wherein the plasma fraction comprises a chromatographically pre-purified cryoprecipitate solution precipitated with aluminum hydroxide is used as a starting material.

18. (Currently Amended) The process according to claim + 2, further comprising the step of carrying out a pH precipitation prior to the flow chromatography with hydroxylapatite of step (i) chromatography to separate fibronectin.

19. (Canceled) The process according to claim 1, characterized in that a VWF containing protein solution from cell culture supernatants is used as a starting material.

4

Serial No.: 10/594,455 Atty Dkt No.: LNK-020

Response to Non-Final Office Action of January 15, 2010

- 20. (Currently Amended) The process according to claim + 2, characterized in that the hydroxylapatite matrix used contains fluoride ions.
- 21. (Canceled)
- 22. (Canceled) A VWF containing composition obtained by the process according to claim 1.
- 23. (Canceled) A composition according to claim 22 comprising a purified VWF preparation.
- 24. (New) The process according to claim 5, characterized in that the flow chromatography with hydroxylapatite is carried out at a pH of 6.8 to 7.5.